ഗ

ŏ



50 mm



DIMENSION TABLE CONCRETE BOX CONCRETE OR NON-PCC COVERS Pull Box \*\*|W \*\*| R Minimum Minimum Depth Box LO WO Minimum \*\* Minimum Depth Box Edge Thickness and Extension (mm) (mm) Thickness and Extension (mm) (mm) (mm) Thickness Toper 260 30 No. 31/2 25 mm No Extension 510 360 8 mm No Extension 390 45 mm 3 mm 32 No. 5 25 mm 560 mm 460 510 mm 350 50 mm 3 mm

IO mm

910 \* Excluding conduit web

600 mm

510 mm \*\* Top dimension

DIMENSION TABLE													
Pull Box	CONCRETE BOX						NON-PCC BOX		STEEL COVER				
	Thickness	Minimum Depth Box or Extension	LO (mm)	WO (mm)	L I	W I (mm)	Minimum Thickness	Minimum Depth Box and Extension	L ** (mm)			Edge Thickness	Edge Taper
No. $3\frac{1}{2}(T)$	40 mm	300 mm	530 ±	370 ±	270 ± 25	430 ± 25	Does Not Apply		510 ±	350 ±	0	13 mm Min	None
No. 5(T)	45 mm	300 mm	750 ±	480 ±	330 ± 25	600 ± 25	Does Not Apply		690 ±	410 ±	0	13 mm Min	None
No. 6(T)	50 mm	300 mm	900 ±	600 ±	430 ± 25	760 ± 25	Does Not Apply		840 ±	510 ±	0	13 mm Min	None

\* Excluding conduit web

\*\* Top dimension

450

## NOTES ON PULL BOXES

40 mm

- I. Traffic pull box shall be provided with steel cover and special concrete footing. Steel cover shall have embossed non-skid pattern.
- 2. Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.
- 3. Top of pull boxes shall be flush with surrounding grade or top of adjacent curb, except that in unpaved areas where pull box is not immediately adjacent to and protected by a concrete foundation, pole or other protective construction, the box shall be placed with its top 30 mm above surrounding grade. Where practicable, pull boxes shown in the vicinity of curbs shall be placed adjacent to the back of curb, and pull boxes shown adjacent to standards shall be placed on side of foundation facing away from traffic, unless otherwise noted. When pull box is installed in sidewalk area, the depth of the pull box shall be adjusted so that the top of the pull box is flushed with the top of the sidewalk.
- 4. Pull box covers shall be marked as follows.
- a. No. 3½ pull box.
  b. "SIGNAL" Traffic signal circuits with or without street and/or sign lighting circuits.
  - 2) "ST LIGHTING" Street and/or sign lighting circuits where no voltage is above 600 V.
  - 3) "SERVICE" Service circuits between service point and service disconnect.
  - 4) "SPRINKLER-CONTR" Sprinkler control circuits, 50 V or less.
  - 5) "CALTRANS" On all pull boxes, except pull boxes marked "SPRINKLER-CONTROL".
  - 6) "TELEPHONE" Telephone service.
- b. No. 5,6,9 or 9A pull boxes 1) "TRAFFIC SIGNAL" Traffic signal circuits with or without street and/or sign lighting circuits.
  - 2) "STREET LIGHTING" Street and/or sign lighting circuits where no voltage is above 600 V.
  - "STREET LIGHTING-HIGH VOLTAGE" Street and/or sign lighting circuits where voltage is above 600 V.
  - 4) "SERVICE" Service circuits between service point and service disconnect.
  - 5) "SPRINKLER-CONTROL" Sprinkler control circuits, 50 V or less,
  - 6) "IRRIGATION" Circuits to irrigation controller I20 V or more.
  - 7) "RAMP METER" Ramp meter circuits.
  - 8) "COUNT STATION" Count and/or speed monitor circuits. "COMMUNICATION" Communication circuits.
- IO) "CALTRANS" On all pull boxes, except pull boxes marked "SPRINKLER-CONTROL". II) "TELEPHONE" Telephone service.
- 12) "TOS COMMUNICATIONS" TOS communications trunk line. I3) "TOS POWER" TOS power.
- 14) "TDC POWER" Telephone demarcation cabinet power.
- 15) "CCTV" Closed circuit television circuits.
- I6) "TMS" Traffic monitoring station circuits.
- 17) "CMS" Changeable message sign circuits.
- 18) "HAR" Highway advisory radio circuits.
- 5. Bonding jumper for metal covers shall be I m long, minimum,
- 6. The nominal dimensions of the opening in which the cover sets shall be the same as the cover dimensions except the length and width dimensions shall be 3 mm greater.
- Extension when box houses 7. All covers and boxes shall be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces shall be flush within 3 mm. Top outside edge of all concrete covers and pull boxes shall have a 6 mm minimum radius.
  - 8. Pull box shall not be installed within the boundaries of new or existing curb ramps.
  - 9. Pull boxes for electroliers and signal standards shall be located at the same station (1.5 m) as the adjacent electrolier or signal standard. Pull boxes shall be placed adjacent to back of curb or edge of shoulder except where this is impractical, a box may be placed in another suitable protected and accessible location.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

## SIGNAL, LIGHTING AND **ELECTRICAL SYSTEMS PULL BOX DETAILS**

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

ES-8

SECTION B-B INSTALLATION DETAILS

L0

TOP VIEW

SECTION A-A

No.  $3\frac{1}{2}(T)$ , No. 5(T) AND

No. 6(T) TRAFFIC PULL BOX

See Note 2

Lift holes

13 mm length sleeve nut

with brass

-Top flush with finished

Clean crushed

rock sump

arade

25 Min to

Grounding bushing

Clean crushed rock sump

box houses transformer

Ground rod when specified or when

75 Max high.

See Note 4.

Grade (See Note 3)

See Note 2

Sealaround conduit

Secure bonding jumper to ground bushings

transformer, ballast, or when specified

Grounding bushing

Lift hole -

Hold-down bolt

Pull box reinforced with advanized

Z-bar welded frame

cover, advanized after

fabrication. See Note 4

Pull box Bonding jumper See Note 5

Reinforced 12 mm Min steel plate

Galvanized 7-ban

welded frame

150 Min all around-

80 Min

B

10 mm ø Brass

and washers,

20 Max

Ground clamp.

Extension

or stainless steel

stud bolts, nuts

2 per box. Recess

in cover for nut. TOP VIEW

12 Min Bonding jumper

Lîp.

all around -